Analysis Report of the Instructional Design Case

1. Group 6 Information

* 1. Group Member names
     1. Christy Reuter
     2. Jessica Sutherland
     3. Joanna Hernandez
  2. Collaboration Tools
     1. Wiki spaces – <http://txtechlearning.wikispaces.com/>
        1. Why use this tool
           1. Asynchronous communication all users can access
           2. Easy for all users to update and view
           3. Host project details all in one place
        2. How tool was used
           1. Host project details and documents
           2. Collaboration between group members
           3. Task and timeline updates
           4. Organization of member responsibilities
     2. Second Life
        1. Why use this tool
           1. Synchronous communication between members
           2. Tool that all users have access to and is familiar with
        2. How tool was used
           1. Agree on goals and responsibilities
           2. Discuss topics in real time
     3. Text Messaging services
        1. Why use this tool
           1. To communicate immediately
        2. How tool was used
           1. To coordinate meeting times on Second Life
  3. Group Contributions

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| Name | Role | Questions |
| Christy Reuter | Final Paper construction & Editor | 2, 5 & 8 |
| Jessica Sutherland | Second Life coordination & text initiator | 3 & 4 |
| Joanna Hernandez | Wiki space organizer and updater | 6 & 7 |

2. Why did Malcolm structure the certificate the way he did?

I believe the faculty at Craiger University proposed a certification program of 40 weeks with evenly distributed computer science curriculum across four certifications and build on previous achieved certification. Malcolm restructured the proposed certification program to meet the goals of the grant. The grant specifies the program should increase graduation numbers, update professional’s knowledge and skills, and also be offered online. The program designed by the university would not increase the number of graduates because it was a sequential program and would take extreme dedication to achieve. If a student was going to take all four certifications, it would take over three years to complete all the certifications. The challenge was to produce professionals now, not three years from now. Malcolm's thought process was guided by schema theory. He separated the certificates by different schemas so that they “are related in systematic and predictable ways.” (pg 39) Therefore, students’ schema of systems engineering, or the like, would continue to grow. Also, the original programs were not specific to professionals. An existing professional would not start a certification program for fundamentals when they already possess those skills.

3. How do you think the faculty reacted to Malcolm's curricular restructuring for the proposed certificate programs?

I think the faculty would react negatively towards restructuring the programs. When the faculty met in the Dean’s conference room, they questioned several of the recommendations Malcolm brought forward, as it related to the online course format. They seemed very hesitant towards change because they had always done it in lecture format, and they didn’t seem open to changing their opinions at this point. The teachers seemed to be focused on the negative side of change and not the positives. Malcolm brought many positive change suggestions forward to the group; however, they were focused on the weaknesses of the online experience. As demonstrated through the meeting, they weren’t able to open their eyes to the innovative ways in which it could attract new students to meet the high demands for the technology industry.

4. If the computer science faculty are resistant to delivering these courses and programs online, what strategies could Malcolm and/or Dr. Tsagas employ to enlist their support?

#### If the computer science faculty continues to be resistant about the new courses and programs online, then I would suggest that Malcolm and Dr. Tsagas employ a variety of different strategies to get the teachers on-board. The first step would be to point out the advantages of the new restructuring system. They could show and discuss with the instructors that the previous layout did not lend itself to a student becoming proficient in one area. The current layout allows for an update in skills and/or a certificate in a specific area that can stand on its own and be useful. Another tactic they could utilize, could be talking to the staff about the attraction for students of completing a program in a shorter amount of time. This would boost their program and offer more qualified people to the booming job market. I think the more the teachers see this as an opportunity and not a burden, then they will be more likely to jump on-board. Lastly, I would give the instructors time to reflect and come back to the table with their own positive ideas of other possible ways to structure the courses for online instruction. With college professors, there must be buy in on their end or they won’t be interested. A collaborative method as such can get the team working towards positive solutions for online based learning.

5. What types of instructional and assessment strategies would you employ to make sure that people completing each certificate were prepared for the demands of the workplace?

After studying constructivism, I would recommend hands on practical assignments. Online assessment using multiple choice testing is good, but projects with in depth thought and application of the content are ideal for developing productive professionals. For example, the programming courses need to have the students actually use the programming language to solve issues that they may encounter in the work force. Students taking web engineering need to actually apply the information they learn and develop a web site. Most of the courses Malcolm developed have a verb in the title. The course needs to employ lessons that put the verb into action.

6. How would you conduct a formative evaluation on Malcolm's web-based module?

**To be able to conduct a formative evaluation,** I would **create** a method and agree on the proper form of evaluation at the beginning of the project, (Lynch and Roecker, 2007). The evaluation method should show if the program of study delivers the desired learning outcomes. The evaluation method in **Malcolm’s** case must assess whether the program meets the learning objectives set, **which will** develop successful technology professionals. After the program is designed, developed**,** and implemented, I would begin **to** deploy an evaluation process. **The evaluation** would first **assess** the satisfaction of the students learning experience, and the instructor's experience in delivering the materials. In addition, it will be important for a formative evaluation to take place with employers hiring the graduates of the program. To compare the success of students in this program, an assessment can be made of an employee's work that was hired out of state, compared to the student who graduates from the new program **Malcolm** created. This assessment would clearly show whether or not the program's graduate students would be more successful than hiring out of state personnel. The results of these formative evaluation methods should be reviewed to assess performance and determine if the new certificate structure meets the learning objective**,** to deliver the program online**.** In summary, the goal of the program was to deliver it in a shorter period of time **and** to develop students into technology professionals.

7. Describe the roles of a project manager, instructional designer, web programmer, and subject matter expert on a project like this one.

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| Roles | Details |
| Project Manager | In charge of the project completion and deliverables.  Plan of Action. Define goals.  Timeline. Communicates project progress. |
| Instructional Designer | Follows ADDIE process: **Analyze:** Define goals. Agree to scope. Estimate program design, costs and efforts required. **Design:** Determine program structure and sequence. Decide program format and delivery. **Develop:** Develop course content, facilitator and student guides, assessments and everything else. **Implement:** Roll out program and prepare facilitators. **Evaluate:** Evaluate program and determine changes to make. |
| Web Programmer | Programs design of training online or with software. Works with subject matter experts, project manager and instructional designer to make sure work produced is what was intended. |
| Subject Matter Expert | Expert in subject area. Provides feedback in subject area. Provides design guidance related to area of subject area. |

8. Develop the ideal budget and timeline for this project.

**Time Line**

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| Action | Amount of Time Required |
| Develop program structure including selecting courses, class duration, and certification application processes. | 2 months before grant deadline |
| Submit documentation for grant proposal. | 1 months before grant deadline |
| Obtain approval from administration & delegate instructors to courses. | 7 months before course begins |
| Instructional designer meets with course instructors to develop measurable objectives, activities and assessments. | 6 months before course begins |
| Instructional designer helps instructor identify and select medium to deliver content. | 6 months before course begins |
| Instructor selects textbook and other content materials for the course. | 5 months before course begins |
| Instructors designs the first half of modules 1 thru 4. | 4 months before course begins |
| Instructor designs second half of modules 5 thru 8. | 4-3 months before course begins |
| Instructor coordinates with Instructional designer to produce any media needed. | 3 - 2 months before course begins |
| Quality check of activities alignment with objects, check hyperlinks, and other online resources. | 3 weeks before course begins |
| Send out welcome e-mail to students. | 1 week before course begins |
| Start executing modules and syllabus. | Course begins |

**Budget for 1 year (4 courses)**

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| Items | Cost |
| Development: Training, ITS | est. $12,000 |
| Technology: Server, Software | est. $70,000 |
| Teaching\*: SME, administration | est. $14000 |
| Technical support & Maintenance | est. $6000 |
| Total | $102,000 |

\*With the budget estimate, a stipend will be provided for instructors teaching online classes.  
For the next 5 years, the budget will increase as more courses are added. The total budget for this project may be up to $800,000.

Resources

<http://www.designingforlearning.info/services/writing/dlmay.htm>  
<http://airweb.org/links/reports/costanalysis.html>  
<http://www.articulate.com/forums/general-discussion/15680-time-create-course.html>  
<http://online.mansfield.edu/media/files/Course_Development_Timeline.pdf>  
<http://online.wsu.edu/faculty_staff/fs_develop_timeline.aspx>  
<http://www.tonybates.ca/2011/03/22/the-cost-of-online-learning-12-50-an-hour/>  
<http://isat-cit.marshall.edu/distance/calculatedcosts.asp>

Our book